CHP Technical Stakeholder Working Group Meeting – September 24, 2009

Southern California Gas Company

CHP Technical Stakeholder Working Group Meeting - Continued

- SoCalGas has a long term commitment to CHP:
  - The largest utility gas utility in America, serving a population base over 20 million, which overlaps with the service territory of SCE and LADWP.
  - We have a long history of encouraging our customers to utilize CHP systems because of the benefits – efficiency, lower operating costs, positive environmental benefits.
  - We understand how customers use gas and have several technical experts who visit dozens of our customers each year to help them understand the technology and economics of CHP.
  - We conduct seminars at our energy resource center for customers on CHP.

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CHP Technical Stakeholder Working Group Meeting - Continued

- SoCalGas has a long term RD&D effort (over $18 million) to encourage advanced and more efficient CHP including:
  - Fuel processing to transform natural gas into hydrogen and carbon for fuel cells. Efforts include development of advanced hydrogen generation, and fuel cell technologies for residential, commercial and industrial applications.
  - Clean generation including zero emission and renewable natural gas. This includes advanced biogas systems, carbon capture, and related technologies.
  - Advanced gas engine technology. For many applications gas engines are the most economical solution but air permitting issues must be overcome.
  - Microturbines, which have few moving parts and low emissions.
  - Gas turbines, which are economical

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CHP Technical Stakeholder Working Group Meeting - Continued

- Why is natural gas good for CHP:
  - Natural gas is the cleanest fossil fuel, about 45% cleaner then coal.
  - According to AGA, north American gas reserves have increased by 35% from 2006 to 2009. According to this report the supply of domestic natural gas could last as long as 100 years.
  - With a plentiful supply of natural gas prices are close to a 7 year low.
  - There are however tight air permitting requirements especially in the SCAQMD.
  - SoCalGas has several air quality experts who work with customer to help them understand the permitting rules.

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CHP Technical Stakeholder Working Group Meeting - Continued

- What efforts do we have to encourage more CHP:
  - Because of the multiyear payback for CHP systems and lack of customer growth we have discovered that it is very difficult to get much growth in usage.
  - We have a ratepayer/shareholder program, Rule 38, that has helped to bring some new CHP projects into the system. The program has a cap of $100,000 per project.
  - In 2001 we first allowed very small CHP systems less then 250 kW to elect core service. More recently we have proposed allowing customers up to 1 MW to elect core service.
  - Per our BCAP, for 2009-2011, we project only about 1% annual usage growth for small CHP (under 20 MW).

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CHP Technical Stakeholder Working Group Meeting - Continued

- What additional help could be provided:
  - With a long payback time, and with a weak economy, tight air quality regulations, standby rates and exit fees, it is difficult to get much new CHP into our system.
  - The self generation incentive program for non-renewable CHP, which supports the goals of AB32 and helps to lower GHG emission, really helped to bring small CHP into our system in the past.
  - We believe that it would be highly beneficial to bring this program back into operation. Along this line we support SB412 (Kehoe) which expands the eligible resources to include all self generation technologies the CPUC determines will support the state's goals for the reduction of GHG, that meet specified efficiency standards.
  - Also any actions CARB or the local air quality districts can take separately or in alignment with each other to reduce the permitting burden for CHP systems in view of their environmental benefits would be beneficial.

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